

# ARNAV KUMAR

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## Education

**Nanyang Technological University**  
Aug 2010 - Jun 2014

- B. Eng. (Hons.) in Computer Science with a GPA of **4.75/5**.
- Minor in Business, Specialization in Intelligent Systems (expected).
- **Dean's List** - Academic Year 2012-13
- Awarded **President's Research Scholarship** - offered to the top 5% of the cohort. (2011-12)
- Awarded full scholarship for university education.

**St. James' School**  
Graduated in May 2010

- Indian School Certification (ISC) - 91%. (A - Level Equivalent)
- Indian School Certificate Examination Result (ICSE) - 94%. (O - Level Equivalent)
- 98% in Computer Science in both ICSE and ISC.

## Work Experience

**IBM Corporation**  
Software Engineering Intern  
May 2013 - Aug 2013

- Developed core components for a mobile port of [IBM Security Access Manager for Enterprise Single Sign - On \(ISAM-ESSOm\)](#) for providing single sign - on capabilities on the iOS platform.
- Built the fully-featured, UIWebView - based embedded browser which provides Web single sign - on capabilities within the App.

**IBM Corporation**  
Software Engineering Intern  
Jun 2012 - Dec 2012

- Development – Prototyped new mobile (iOS and Android) solutions aimed at enhancing user experience and security of sensitive user information. Explored and implemented methods of automated form - filling techniques.
- Quality Assurance – Configuration and troubleshooting server side components of a new solution for Privileged Identity Management. Automated the user-creation process during load-testing, reducing time required at this stage by 66%.

## Project Work

**Final Year Project**  
Aug 2013 - Present

- Developing a proof-of-concept game demonstrating interaction with real world objects virtually.
- Interfacing a Kinect, an iPhone, and a projector with a central server to process motion.

**Data Mining**  
Aug 2013 - Oct 2013

- Led a team of 6 to [develop an application](#) (with a Django backend) to generate a timeline for the flow of Twitter hashtags across the globe and track local trends.

**Natural Language Processing**  
Aug 2013 - Oct 2013

- [Developed an application](#) (with a Java + Flask backend) to summarize and analyse the sentiment of Twitter users about a subjects after extracting descriptive phrases from related tweets.

**Software Engineering (II)**  
Jan 2013 - May 2013

- Lead developer for [dBauggle](#), an iOS word-game for children with special needs, built using the cocos2d framework.

**Software Engineering (I)**  
Feb 2012 - May 2012

- Lead developer for P.A.W.S., a pet-centric social network (with a Django backend) for pet agencies and prospective pet owners to interact, start the process of adoption and provide location based services.

**Pet Projects**

- **Pebble Music Tweeter** - [Pebble Watchapp + companion iOS app](#) using the Twitter API and Pebble SDK to Tweet the currently playing music from the smartwatch.
- **Keepr** - iOS app for users to keep track of uncommon objects and trigger memory flashes to recall their last placement. (Work in progress)

## Skills and Coursework

**Relevant Courses**

- Object Oriented Programming & Data Structures, Software Engineering, Database Systems, Operating Systems, Algorithms, Advanced Algorithms, Artificial Intelligence, Natural Language Processing, Data Mining.

**Technical Skills**

- Java, Objective-C, Python (& Django framework), Javascript, HTML and others.
- Represented NTU in International Collegiate Programming Competition (ACM-ICPC) Regionals 2011 held in Kuala Lumpur.

## Interests and Extra - Curricular Activities

**Extra - Curricular Activities**

- **President - NTU Open Source Society** - Headed the management committee of the special interest club that promotes the hacker culture. (AY2012-13)
- **IT (Media) Officer - Computer Engineering Club (Student Council of the School)** - Steered the annual branding initiative, produced and redesigned the School's publication and organised the school's first Hackathon. (AY2012-13)

**Interests**

- Reading, Writing, Sports (football, rugby).
- Played Rugby competitively for 8 years.
- Member of the NTU Rugby Squad between Sept 2010 and Aug 2011.